

Malaysian as the Component of Labour Force for Construction Industry in Malaysia

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Abstract. The construction sector plays a significant role in the economy in order to achieve the inspiration to be a developed nation in 2020. In the effort to increase the efficiency of the sector, Construction Industry Development Board (CIDB) had pledged to continue investing in human capital development in the construction industry as one of its initiatives under Productivity Thrust in Construction Industry Transformation Programme (CITP). However, currently, the construction industry of Malaysia is depressed by the low-wage and low productivity trap due to substantial reliance on low-skilled foreign workers. The number of local workers are not only low but are decreasing drastically due to out-migration towards better job opportunities in other sectors. Therefore, this research aims to establish a conceptual framework for Malaysians as the component of the labour force in the construction industry in Malaysia through identifying the landscape of participation of local labour, investigating factors hindering participation of local labour and propose initiatives to increase the numbers of participation of local labour. This paper presents a review of literature from journals, conference proceedings, and books. Based on the review, a framework consisting of four (4) components (i.e., Government Agenda, Local Labour in Malaysian Construction Industry, strategies to improve participation, and expected key outcomes of CITP for Productivity) is proposed. These findings will assist the extended investigation in the identification of ways to improve the participation of local labour for the Construction Industry in Malaysia.

1 Introduction

Since the 1980s, Malaysia has become one of the fastest developing countries in Southeast Asia where mega project are being introduced and developed in Malaysia. The construction sector plays an important role in the transformation of the country and its aim to become a developed nation in the year 2020 [1]. Furthermore, as an independent country, Malaysia has started to gain stability in its economy. In fact, during the world economic crisis in 1997, Datuk Seri Dr Mahathir Mohamed, the Prime Minister during the time has introduced mega projects for the country in order to boost the economy.

Nevertheless, the rise of the construction industry has caused dependency on foreign workers which created various problems. Among the problems is dissatisfaction of the contractors with the productivity level of foreign workers, the outflow of local currency, transfer of skill and knowledge of foreign workers to their country, unemployment of local people and social ills [2]. Besides, Rahman et al [4] claimed that, apart from social problems created by foreign workers, most of the foreign workers arrived in Malaysia were unskilled which leads to less productivity and assurance of quality in the construction industry. Despite, Malaysia realizing that the reliance towards the foreign workers may provide an impact to the final delivery to become a high-income country by 2020 [3], the decrease in the level of interest among the native talent and high turnover in the construction industry has

driven the employers to depend on foreign workers [5]. However, problems resulting from the massive numbers of foreign workers have caused the increasing demand for local labour [6].

In regard to that, under the Construction Industry Transformation Program (CITP), productivity become one of the thrust in order to strengthen the construction industry in Malaysia. Yet, according to Carvalho [7], Malaysia is still lagging behind other countries such as Australia, China and the US in the area of productivity improvement within the construction industry. The Prime Minister of Malaysia emphasized that the government will focus on the thrust in the CITP for productivity, workforce, technology and process so that the changes for the industry can be made accordingly [7].

2 Background of The Study

The New Economic Model (NEM) document discovered that the supply of Malaysian local labour is not only low compared to foreign labour, but the amount started to drop rapidly due to the outmigration of Malaysian towards other countries which offer better opportunities and returns [8]. Not surprisingly, in 2007 only 106 out of 823 large companies in the construction industry were operating without using foreign labour [9]. As mentioned in The National Economic Advisory Council (NEAC) documents in 2010, it was estimated that in 2008 about

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350,000 Malaysians which is half of the numbers who had tertiary education were working abroad.

The labour shortage and local recruitment in the construction industry have become a big challenge for the government. Carpio et al [9] stated that the construction industry is known as the industry with low wages, working in a high level of difficulties and having a limited career development opportunity. In addition, Hanafi et al [10] suggested that the syndrome of 3D which is named as difficult, dirty and dangerous has worsened the level of interest of local workforce and is continually decreasing which give impacts towards the urgent needs of them in the construction industry.

It is challenging for Malaysia in producing human capital that is comprehensive and at world class level [11]. Furthermore, there is convincing evidence to show the struggle in the recruitment of local labour has forced employers to recruit the immigrants to work in the construction industry [12]. According to El-Gohary and Aziz [13], the most important factor affecting labour productivity in the construction industry is the incentive program for the labour itself. Plus, the slow process of mechanization and reluctance local to participate in construction industry aggravated the labour shortage problem [2]. Therefore, this study aims to identify the elements related to Malaysians as the component of the labour force for the construction industry in Malaysia.

3 Methodology

Literature review was conducted utilizing journal papers, conference proceedings, and other publications between the year 1992 until 2018. A search was carried out using ScienceDirect, Google Scholar and government databases. The search identifies 83 potentially relevant references, and 31 were selected in these reviews.

4 Literature Finding

4.1 The landscape of participation of local labour in the construction industry

The Department of Statistics shows that Malaysia has 32 million in the population with an annual growth rate of 1.5 percent.

Table 1. Labour Force Participation Rate in Malaysia.

Period (Jan)	Labour Force ('000)	Employed ('000)	Unemployed ('000)	Labour Force Participation Rate (%)	Unemployment rate (%)
2016	14,652.0	14,150.5	501.5	67.7	3.4
2017	14,880.9	14,366.8	514.1	67.7	3.5
2018	15,187.0	14,670.5	516.5	68.2	3.4

(Source: Department of Statistics Malaysia, 2018; Ministry of Finance, 2018)

Table 1 presents the labour force participation rate in Malaysia which shows in January 2018, there was a 68.2 percent labour participation from various industries. The labour forces are the locals in the range of 15 to 64 years

and either employed or unemployed. The increasing numbers of the employed labour force from 2016 to 2018 provides a good indicator of a stable employment rate for Malaysia. Despite the good indicator, there was no improvement in the unemployment rate from 2016.

Table 2. Number of Vacancies by Sector.

Numbers of Vacancies by Sectors	2013	2014	2015	2016	2017	% Share
Agriculture	306,542	240,552	269,469	174,751	164,417	20.5
Mining	1,880	2,605	9,929	1,857	2,904	0.2
Manufacturing	456,478	352,784	313,396	376,394	378,257	44.1
Construction	308,783	202,878	208,912	127,985	171,132	15.0
Services	329,007	275,199	287,050	173,102	210,459	20.3

(Source: Department of Statistics Malaysia, 2018; Ministry of Finance, 2018)

Table 2 presents the numbers of job vacancies in Malaysia. Based on the table, the construction industry is forth highest share from 5 sectors for vacancies in Malaysia. The table also shows that the decreasing numbers of vacancies from 2013 to 2016. However, in 2017 there was an increase in vacancies even though not higher than that in 2013. This may be due to the fact that many development projects were implemented.

Table 3. Number of Placement by Sector.

Numbers of Placement by Sectors	2013	2014	2015	2016	2017	% Shar
Agriculture	1,334	3,908	2,870	1,639	1,160	7.2
Mining	92	304	150	0	7	0.0
Manufacturing	18,082	19,615	20,693	11,342	9,043	50.1
Construction	1,547	1,980	4,855	2,396	465	10.6
	14,207	14,946	12,529	7,266	5,429	32.1

(Source: Department of Statistics Malaysia, 2018; Ministry of Finance, 2018)

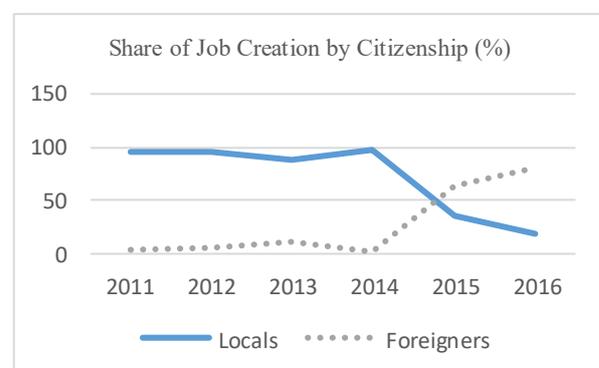


Fig. 1. Share of Job Creation by Citizenship

(Source: Department of Statistics Malaysia, 2011-2016; Bank Negara Malaysia, 2018)

However, Wei et al [14] stated that a large share of net jobs created by Malaysia went to foreigners with most of the foreign workers possessing secondary education only. Figure 1 shows the share of job creation by citizenship, which is 2011, only 4.5 percent job creation

went to foreigners but starting in 2015, 64.4 percent job creation were undertaken by the foreigners. This rapidly increasing percentage is not a good indicator for the locals.

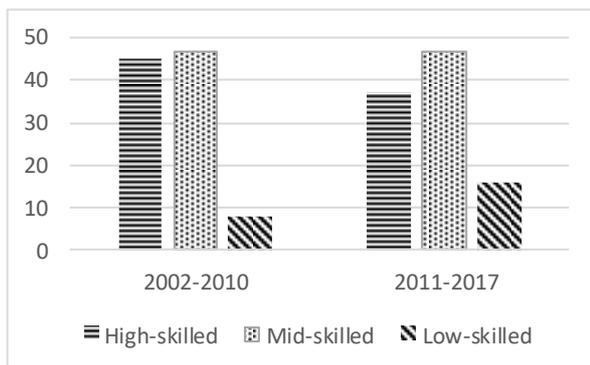


Fig. 2. Share of Job Creation by Skill Level

(Source: Department of Statistics, Malaysia, 2002-2010, 2011-2017; Bank Negara Malaysia, 2018)

Figure 2 shows the share of job creation by skill level between 2002 and 2017. Based on the figure, in 2002 to 2010 period, there was only 8 percent low-skilled workers but doubled to 16 percent during 2011 to 2017. Besides, between 2011 – 2017, the percentage for high-skilled workers were decreasing but increasing in low-skilled worker’s percentage.

According to Purnamasari et al. [15], most of the foreign labour in Malaysia are low skilled and from the total registered foreign workers, only 2 percent are expatriates. Furthermore, in 2010 there was only 46,000 expatriate in Malaysia compared to 310,000 skilled Malaysians living abroad which indicates highly educated Malaysians seek higher skilled jobs elsewhere.

However, based on table 4, the registered construction personnel increased with 7.1 percent in 2016 from a total of 716,542 construction personnel who were registered in 2015 (including both local and foreign workers). For construction workers per se, an increment of 4.78 percent from 431,557 personnel in 2015 to 452,192 numbers of personnel in 2016. As for skilled workers, there were increments of 80.04 percent from 2015 to 2016.

Table 4. Registered Construction Personnel by Category of Worker.

Category of Worker	2015		2016	
	Local	Foreign	Local	Foreign
Construction worker	295,560	135,997	304,167	148,025
Skilled construction worker	50,855	1,675	91,637	1,939
Manager and site assistant manager	51,410	1,462	58,646	1,052
Construction supervisor	50,933	272	116,579	1,566
Administrative personnel	126,716	1,662	42,814	138
Total	575,474	141,068	613,843	153,720

(Source: CIDB Malaysia, 2017)

For the total of local labour, there were increments of 14.26 percent compared to the foreign labour that only increased with 9.66 percent from 2015. Therefore, regardless of whether there was increment for the local workers for skilled and supervisor for construction, there was also an increment in the foreign workers.

Table 5 presents the labour productivity performance and the construction sector recorded the lowest productivity level compared to other economic sectors. Nevertheless, the construction sector has shown growth in productivity of 5.5 percent to 12.4 percent in 2016. Despite the lowest productivity level, construction sector plays an important role as the key industry in the Malaysian economy by its multiplier effect on other industries [3].

Table 5. Labour Productivity Performance.

Main Economic Sector	RM		
	2014	2015	2016
Agriculture	54,924	53,676	55,485
Manufacturing	98,153	105,138	106,647
Construction	33,744	35,601	40,018
Services	64,246	66,328	68,166

(Source: CIDB Malaysia, 2017; Malaysian Productivity Corporation)

4.2 Factors hindering the participation of local labour in the construction industry

Table 6 shows 12 examples of factors hindering the participation of local labour in the construction industry that being identified from previous researcher (i.e., Low Wages Rate, Low Demand for Local Labour, Long-Term Employment, Loose of Labour Policies, Monopoly of Migrants, 3D factors which is dangerous, difficult and dirty, Unsuitable for Higher Education Level, Poor Images, Employers Preference, Low Skilled Perception, Low Remuneration for the Individual and employment status).

Table 6. Factors hindering the participation of local labour in the construction industry.

Variable	Authors
Low Wages Rate	[4] [8] [16] [6] [17]
Low demand for local labour	[18]
Long-term employment	[4] [9]
Loose of labour policies	[12] [16] [8] [20]
Monopoly of migrants	[4] [12] [6] [19]
3D factors	[10] [21] [4] [9]
Higher education level	[4] [9] [22] [21] [23]
Poor images	[4] [21] [24]
Employment Preference	[4] [25] [26]
Low skilled perception	[6]
Low remuneration	[6]
Employment status	[27] [23] [28]

According to Abdul-Rahman et al., [4] the local workers tend to migrate to another country in order to earn better wages than Malaysia. Other than that, the employers usually pay the foreign workers with a lower

rate of compensation and the whole average wage rate for the sector will deteriorate and the increment is very slow [8]; [16]. This situation will impact the attractiveness of local labours into the industry [6]. Additionally, the failure of the Malaysian Trade Union Congress (MTUC) to persuade the government to stop the inflow of foreign workers into the country which is depressing the wage structure and weakens the incentive to attract local labour [17].

Other than that, the inflow of foreign workers that raises the fraction of the population in a particular group would put a downward pressure towards the employment rate for workers in the group itself, thus the demand from the group will be low compared to the inflow of the foreign workers [18]. Abdul-Rahman et al., [4] added that long-term employment is one of the factors that made foreign workers choose the construction sector in Malaysia. Conversely, the local labour found it unattractive to further their career in the construction industry. Besides, as supported by Carpio et al., [9] the construction is a sector which is well known for having limited upward career movement for the labour force.

On the other hand, the monopoly and large availability of migrants becomes one of the factors that hinders the local and new graduates entering the construction industry [4], [12]. The immigration causes substantial internal movement of local from the construction industry [6]. According to the Malaysian Employers Federation (MEF) [19] the labour intensive sector like construction not attractive to local workers and thus rely heavily on foreign workers resulting in 70 percent of this sector to be monopolised by foreign workers.

The loose labour policies cause the influx of unregistered foreign workers into the construction industry contributes to the factors that the sector become unattractive to the local [12] and cause the local workers to lose out in the competition [16]. According to Narayan and Lai [8] the poor administration, enforcement and frequent changes in policy directions have often led to confusion among the industry. In addition, Athukorala and Devadason [20], stated that there are policy debates in contentious issue in labour importing countries when the country supposedly only regulates labour inflows to supplement the local workforce by not replacing them.

Furthermore, the local workforce lost their interest to works in the construction industry due to industry's 3-D syndrome namely difficult, dirty and dangerous [10],[21]. The 3-D images have long been associated with the construction industry which causing locals to refuse to be accepted by the industry and some employers choose to employ foreign workers rather than improving the work conditions to attract locals [4]. Thus, the condition of works could not attract the local workforce to fill the rapidly demand of the labour [9].

It became worse when the local people have higher education levels and aspirations to choose either the construction sector or others [4],[9]. Plus, unskilled labour demand is higher than for skilled labour due to the labour intensive nature of the industry [22]. Hamid et al., [21] added that there are wider opportunities for

tertiary education that cause the Malaysian youth's aversion towards the industry. The seeking of higher education by local young generations for a more lucrative profession and consequently live a better life than their parents did [23].

Additional, the poor images of the construction industry in the eyes of local workers make it more serious [4],[21]. The reliance on the foreign workers made the industry only for low value-added activities that only require lower levels of skills and offer low remuneration [6]. Mohamed et al., [16] reported that the possible uncertainty at the same time by increased such activities likes crime, culture and illegal strikes by foreign workers. Based on CIDB [24], there is a case study by CITP that shows locals often identified the construction industry in negative perception as challenging to work that makes them unwilling to take the jobs.

The employers chose to employ foreign workers rather than attracting the local worker's due to low wages rate and do not want to improve the working condition [4]. The advantages of migrant's workers are cited in terms of their general attitude were they tended to be more motivated, reliable and committed than domestic workers [25]. Furthermore, the employers are merely resorting to contract labour to flourish on profits on the back of cheap, easily exploited and vulnerable of foreign workers [26].

According to Saleh [27], local workers tend to go for a permanent job with the permanent wages and insurance protection as a guarantee to their life for the future. This is supported by Dom et al., [23], who found that the lacks of participation by local workforce are due to the temporary employment status. Construction usually offers temporary jobs like working based on the contract which cause the local people to decline as they seek a permanent job with stable income and more secure career path [28].

4.3 Ways to increase the number of participation in local labour

Table 7 shows 10 examples of the ways to increase the number of participation local labour in construction industry that being identified from the previous researcher which consist of many ways such as raising of wages, enhanced workplace safety practice and procedure, incentive programs, education & training, enforcement of policy, improving working conditions, awareness of opportunities, Industrial Building System (IBS), governance structure, recruitment policies and non-monetary compensation.

A certain degree of wage increment is needed in order to attract local labour to the construction industry and would make foreign workers non-viable [8]. According to Rasiah et al., [17] the government has been called by MTUC to set a minimum wage for the lowest paid workers to encounter the cost of living which had increased over the 2000s. Plus, it is a popular employee engagement initiatives include opportunities for career progression and learning and development. The CIDB [24], is of the opinion that if Malaysia can create more

skilled local workforce and industry can pay them higher, the country will be able to break the reliance on foreign workers.

Table 7. The ways to increase the number of participations in local labour.

Variables	Authors
Raise of Wages	[8] [17] [24]
Incentive Programs	[4] [29] [30] [22]
Education and Training	[8] [15]
Enforcement of Policy	[4] [6] [14]
Improving Working Condition	[31] [32] [23]
Awareness of Opportunities	[4] [32] [33]
Industrial Building System (IBS)	[24] [4] [34]
Governance Structure	[4] [17]
Recruitment Policies	[15]
Non-monetary compensation	[31] [35]
Safety Practices & Procedure	[32] [36] [37]

The government needs to provide special economic incentives to local workers to participate in the industry [4],[29]. Construction Skilled Labour Risk Analytics (CLMA) [30] has come out with several incentive programs in order to attract, retain and develop workers such as; give a right amount in compensation and benefit, incentives and bonuses, and corporate culture and work environment. According to Hasan [22], Singapore provides special incentives to attract skilled Malaysian workers such as longer work permits and possibility of permanent resident.

According to Narayan and Lai [8] investing in skill formation among natives through education and training will help hasten the construction industry. According to Purnamasari et al., [15] 6 percent of GDP spent on education and training were RM4.1 billion spent on post-secondary vocational and technical education (TVET). In addition, the efficiency of this initiative will help in closing the skills gap among Malaysians.

In order to reduce the attractiveness of the sector in the view of immigrants, the government needs to changes the recruitment policies to discourage the employment of foreign workers [4]. Emerging key policy objectives in managing the admitting foreign workers and reducing overdependence on them without harming Malaysian workers [6]. Malaysia would benefit from a clear shift away from the economy by the implementation of well-aligned, coordinated and consistent public policies which consist of talent development, research and development and industrial upgrading initiatives [14].

Additionally, to restrain the downward trend in participation growth of the labour force, the employer may react by improving the working condition and making works more attractive [31]. This is further supported by Mazlan, Yusof & Saud [32] which states that the image and working conditions in the industry should be improved to gain the interest of the local youths. Dom et al., [23] added that in order to attract or retain the workforce, the employers play an important

role to provide some good facilities such as health facilities.

Other than that, there is a need for a campaign to increase the awareness of the opportunities in the industry, driven by a government-led advertising campaign [4]. According to Mazlan et al., [32] the career counselor should expose the opportunities in the construction industry in order to initiate interest of students towards the industry which can be accumulated during the school environment. Furthermore, in order to increase the effectiveness participation of young people, some consideration should be provided to facilitate their awareness, knowledge, and capacity-building skills [33].

Moreover, CIDB [24] stated that the advanced countries like Australia, UK and Singapore only have one method of construction which is IBS due to fewer skilled workers required and to reduce the number of unskilled workers which in turn will attract more local because they can be paid higher. Thus, in order to encourage local labour to consider joining the industry, industrialize building system should be introduced [4]. This is supported by Halim, Razak and Hamid [34] that the IBS could attract local workers interest in increasing the efficient level of productivity.

According to Abdul-Rahman et al., [4] the government could minimize the negative impacts of foreign workers and attract local workers by strengthening the governance structures. Government focus on unskilled labour over the 1980s and the 1990s caused the initiative of firms to upgrade the performance in the development of industrialization projects have stalled [17]. According to Purnamasari et al., [15] by tapping into the highly educated Malaysian diaspora could help the country to close the skills gap as approximately half or more than 300,000 Malaysians living in OECD countries in 2010 had completed tertiary education or a higher level of study.

Furthermore, by increasing non-monetary compensation, it will make an attractive option for the local labour to join the industry [31]. Performance and reward system is the best link and direct way to motivate, attract and retain employees with competence, knowledge and skills in order to achieve organization's goals [35].

In order to allow local to take pride in their involvement in the construction industry, the employers need to enhanced the safety procedures at the workplace [32]. The majority of local workers have a high degree of risk awareness and self-rated competence towards the jobs they seeking [36]. The contractors have a responsibility to make sure that their workers are not exposed to risks which can affect their safety and health [37].

5 Proposed Conceptual Framework

Figure 2.4 proposes a conceptual framework of local labour participation enhancement for the construction industry in Malaysia. The conceptual framework consists of three main elements: *National Agenda (E1)*; *Issues on local labour (E2)* and *Way forward (E3)*, these are based

on the understanding of issues related to the local labour participation in the construction industry and the way to enhance the number of participation.

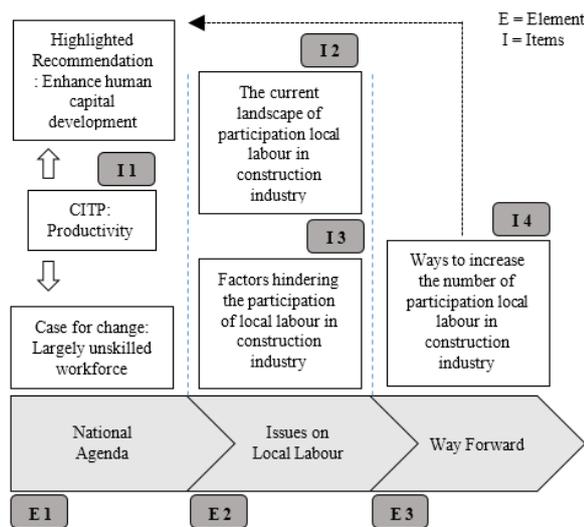


Fig. 3. The conceptual framework of local labour participation enhancement for the construction industry in Malaysia

The CITP Strategic Thrust: Productivity (I1) under the National Agenda (E1) is divided into two outcomes in the conceptual frameworks which are the case for change and the highlighted recommendation. In the case for change, the framework focusing largely unskilled workforce and for the highlighted recommendation the framework focusing on the enhancement of the human capital.

There are two factors being emphasized under Issues on Local Labour (E2) which is the Current Landscape Participation Local Labour in Construction Industry (I2) and Factors Hindering the Participation Local Labour in Construction Industry (I3). For The Way Forward (E3), the framework stressing about Ways to Increase the Number of Participation Local Labour in Construction Industry (I4). Hence, (E3) and (I4) will contribute to the CITP: Productivity (I1) under the National Agenda (E1).

6 Conclusion

This work has identified the general and specific issues on the participation of local labour in the Malaysian construction industry. The evidence is clear that there are ways and opportunities to increase the number of local labour participation in the construction industry. Hence it is possible to achieve the national agenda for productivity under the CITP thrust.

3 Equations and mathematics

This research, in conceptual terms, is limited to literature and past empirical research which have provided valuable evidence for scholars and practitioners. Future studies can adapt the proposed conceptual framework to become the structural model for statistical analyses, to analyse and confirm the relationships between the

elements of factors hindering the local labour towards construction industry, the ways increase the participation and the productivity under CITP thrust. The conceptual framework is relatively new and has the potential to be developed in future.

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